Fact Sheet

Revisions to Definition of Cogeneration Unit in Clean Air Interstate Rule (CAIR), CAIR Federal Implementation Plans, Clean Air Mercury Rule (CAMR), and Technical Corrections to CAIR, CAIR FIPs, CAMR, and Acid Rain Program Rules (Cogeneration Unit Final Rule)

ACTION

- On October 11, 2007, the U.S. Environmental Protection Agency (EPA) finalized the revisions to the cogeneration unit definition in the Clean Air Interstate Rule (CAIR) model trading rules, CAIR Federal Implementation Plans (CAIR FIPs), and Clean Air Mercury Rule (CAMR). This action was proposed in the Federal Register on April 25, 2007 and comments on the proposal were inserted in the public record.

- The CAIR model trading rules, the CAIR FIPs, CAMR, and the CAMR Hg model cap-and-trade rule and the proposed CAMR Federal Plan all include an exemption for certain cogeneration units. To qualify for this exemption, a unit must, among other things, meet the definition of cogeneration unit in each rule. In all of these rules, this definition includes an efficiency standard, the purpose of which was to close a potential loophole. With the standard, a unit has to send a measurable amount of thermal energy to a process and achieve efficiency gains through cogeneration in order to qualify as a cogeneration unit and thus, potentially qualify for the cogeneration unit exemption. The efficiency standard was calculated using all energy input for a unit, which EPA believes has the unanticipated and unintended consequence of making it very difficult for biomass cogeneration units to qualify for the cogeneration unit exemption (unless they co-fire significant amounts of fossil fuel, such as coal).

- With this action, EPA has made a change to the efficiency standard in the cogeneration unit definition in these rules and intends to adopt the changes if it finalizes the CAMR Federal Plan. Specifically, EPA revised the efficiency standard in the cogeneration unit definition so that the efficiency would be calculated using only the portion of a unit's energy input that is from fuels other than biomass, rather than all energy input.

- The change to the cogeneration unit definition in the CAIR model trading rules, the CAIR FIPs, CAMR, and the CAMR Hg model cap-and-trade rule, and the CAMR Federal Plan (if finalized) will make it possible for some additional units to qualify for the cogeneration unit exemption in these rules. This will have little effect on the projected emissions reductions and the environmental benefits of these rules.

- EPA is not making any changes to state emissions budgets under CAIR or CAMR because the units EPA believes to be affected by this rule were not part of the original heat input inventories used to calculate the budgets.

- This action also clarifies how total energy input and thermal efficiency are to be calculated for all cogeneration units and finalizes additional minor technical corrections

to CAIR and Acid Rain Program rules.

BACKGROUND

- Information received by EPA indicated that a group of biomass cogeneration units were unable to meet the efficiency standard as originally issued (without burning significantly more fossil fuels) because of the technical differences that exist between biomass cogeneration units and other units. These characteristics include: fuels with relatively high moisture content; units designed for relatively low pressure and temperature conditions; and relatively small boilers and steam turbines that are inherently less efficient due to their size. Making it possible for a number of cogeneration units that co-fire biomass to qualify for the exemption seems to be consistent with EPA objectives.

- The use of biomass as a fuel is becoming an increasingly attractive energy choice in the United States due to high fossil fuel prices, the need to lessen the environmental impact of energy production, and concerns about national energy security. Allowing existing biomass cogeneration units to qualify for the exemption is consistent with EPA objectives including reducing greenhouse gas intensity, improving air quality, and encouraging energy independence.

Background on CAIR & the CAIR FIP

- On March 10, 2005, EPA announced CAIR, a rule that will achieve that largest reduction in air pollution in more than a decade. CAIR regulates SO_2 and/or NO_X emissions from 28 eastern States and the District of Columbia that contribute to levels of fine particles (PM2.5) and/or ozone in areas above the air quality standards in downwind States. For more information see www.epa.gov/cair

- States must develop State Implementation Plans (SIPs) to achieve the emission reductions required by CAIR and may choose what measures to adopt to achieve the necessary reductions and which sources to control. CAIR included model rules for SO_2 and NO_X emissions cap-and-trade programs, covering fossil-fuel-fired power plants, that States can choose to adopt to meet the emission reduction requirements.

- In 2006, EPA published CAIR FIPs for all 28 States and the District of Columbia covered by CAIR to ensure the required emission reductions are achieved on schedule for any State(s) without an approved SIP. As the control strategy for the FIPs, EPA adopted the model SO_2 and NO_X cap-and-trade programs for fossil-fuel-fired power plants that EPA provided in CAIR as a control option for States. EPA intends to withdraw the FIP for any State in coordination with approval of that State's SIP that meets the CAIR requirements.

Background on CAMR & the Proposed CAMR Federal Plan

- On March 15, 2005, EPA announced CAMR, establishing standards of performance limiting mercury emissions from new and existing coal-fired power plants and creating a market-based emissions cap-and-trade program that reduces nationwide utility emissions of mercury in two distinct phases. CAMR sets emission reduction requirements for each

State, the District of Columbia, and Indian Country. For more information see www.epa.gov/camr

- States must develop State Plans to achieve the mercury emission reductions required by CAMR and may choose what measures to adopt to achieve the necessary reductions. Unlike CAIR, under which States may choose which sources to control, CAMR requires that States control emissions from coal-fired power plants. CAMR included a model rule for a mercury emissions cap-and-trade program, covering coal-fired power plants, that States can choose to adopt to meet the emission reduction requirements.

- In 2006, EPA published a proposed CAMR Federal Plan for coal-fired power plants located in all jurisdictions covered by CAMR to ensure the required emission reductions are achieved on schedule. As the control strategy for the Federal Plan, EPA proposed to adopt the model mercury cap-and-trade program for coal-fired power plants that EPA provided in CAMR as a control option for States. EPA will not adopt the Federal Plan for any State with a timely submitted and approved State Plan that meets the CAMR requirements, and the Federal Plan will no longer apply for any State after the Agency approves a State Plan that meets the CAMR requirements for that State.

FOR MORE INFORMATION

- The text of this final rule is available on EPA's website at www.epa.gov/cair or www.epa.gov/camr and in Docket ID Number EPA-HQ-OAR-2007-0012

- For more information, call Elyse Steiner at EPA's Office of Atmospheric Programs, (202) 343-9141.